

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended): A controller that receives printing data for each page from a host, having a data transferring unit that transfers the printing data to a printer without having ~~an exclusive memory~~ a storage unit for storing the printing data in the controller when printing is resumed after an error has occurred in the printer and controls the printer to print the printing data while monitoring states thereof is characterized in that it comprises:

an analyzing unit that analyzes the printing data and manages the number of pages transferred to the printer; and

an error processing unit that passes error data and the number of pages of which printing have been completed to the host when an error occurred in the printer.

Claim 2 (Currently Amended): ~~A controller according to claim 1~~ that receives printing data for each page from a host, having a data transferring unit that transfers the printing data to a printer without having a storage unit for storing the printing data in the controller when printing is resumed after an error has occurred in the printer and controls the printer to print the printing data while monitoring states thereof is characterized in that it comprises:

an analyzing unit that analyzes the printing data and manages the number of pages transferred to the printer; and

an error processing unit that passes error data and the number of pages of which printing have been completed to the host when an error occurred in the printer,

wherein[[,]] said analyzing unit is provided with a plurality of analyzing units corresponding to different types of printers, and one of the analyzing units is selected corresponding to the type of printer connected to the controller.

Claim 3 (Original): A controller according to claim 1 wherein,
said controller further comprises a preset data storage unit that stores preset data of printers to be connected to the controller,
said analyzing unit and said error processing unit execute the respective processes based on the preset data of a printer currently connected to the controller which is stored in the preset data storage unit.

Claim 4 (Original): A controller according to claim 2 wherein,
said controller further comprises a preset data storage unit that stores preset data of printers to be connected to the controller,
said analyzing unit and said error processing unit execute the respective processes based on the preset data of a printer currently connected to the controller which is stored in the preset data storage unit.

Claim 5 (Original): A controller according to claim 1 wherein,
said controller further comprises a printer recognizing unit that inquires and recognizes functions of the printer connected to the controller,
said analyzing unit and said error processing unit execute the respective processes based on the functions of a printer currently connected to the controller recognized by the printer recognizing unit.

Claim 6 (Original): A controller according to claim 2 wherein,
said controller further comprises a printer recognizing unit that inquires and recognizes functions of the printer connected to the controller,
said analyzing unit and said error processing unit execute the respective processes based on the functions of a printer currently connected to the controller recognized by the printer recognizing unit.

Claim 7 (Original): A controller according to claim 3 wherein,
said controller further comprises a printer recognizing unit that inquires and recognizes functions of the printer connected to the controller,
said analyzing unit and said error processing unit execute the respective processes based on the functions of a printer currently connected to the controller recognized by the printer recognizing unit.

Claim 8 (Original): A controller according to claim 3 wherein,
said preset data storage unit stores preset data of the printer informed from the host in advance.

Claim 9 (Original): A controller according to claim 5 wherein,
said preset data storage unit stores preset data of the printer informed from the host in advance.

Claim 10 (Original): A controller according to claim 1 wherein, when a printer incapable of transmitting a paper feed completion signal is connected to the controller, said error processing unit estimates the number of pages of which printing have been completed based on the performance of the printer and transmits the estimated number of pages with error data to the host.

Claim 11 (Currently Amended): A printing system comprising a host, a controller that receives printing data for each page transmitted from the host and a printer that receives the printing data from the controller and carries out printing while monitoring states of the printer by the controller, is characterized in that:

said controller comprises,

an analyzing unit that analyzes the printing data and manages the number of pages transferred to the printer, and

an error processing unit that passes error data and the number of pages of which printing have been completed to the host when an error occurred in the printer, wherein

when an error occurred in the printer, said host transmits printing data of which printing has not been completed to the controller based on data informed by the controller after the printer is recovered by correcting the error, said controller transfers said printing data to the printer and controls the printer to carry out re-printing for each page;

wherein the printer does not have ~~an exclusive memory~~ a storage unit for storing the printing data when printing is resumed after an error has occurred in the printer.

Claim 12 (Currently Amended): A recording medium readable by computers on which programs are recorded which enable a computer to process the steps of receiving printing data for each page from a host, transferring the printing data to a printer and controlling the printer to print the printing data while monitoring states thereof, is characterized in that:

said programs enable said computer to function as an analyzing unit that analyzes the printing data and manages the number of pages transferred to the printer; and

an error processing unit that informs error data and the number of pages of which printing have been completed to the host when an error occurs in the printer;

wherein the printer does not have ~~an exclusive memory~~ a storage unit for storing the printing data when printing is resumed after an error has occurred in the printer.

Claim 13 (Currently Amended): A recording medium ~~according to claim 12~~ readable by computers on which programs are recorded which enable a computer to process the steps of receiving printing data for each page from a host, transferring the printing data to a printer and controlling the printer to print the printing data while monitoring states thereof, is characterized in that:

said programs enable said computer to function as an analyzing unit that analyzes the printing data and manages the number of pages transferred to the printer; and

an error processing unit that informs error data and the number of pages of which printing have been completed to the host when an error occurs in the printer;

wherein the printer does not have a storage unit for storing the printing data when printing is resumed after an error has occurred in the printer,

wherein, said analyzing unit is provided with a plurality of analyzing units corresponding to different types of printers, and one of the analyzing units is selected corresponding to the type of a printer connected to the controller.

Claim 14 (Original): A recording medium according to claim 12 wherein,

said controller further comprises a preset data storage unit that stores preset data of printers to be connected to the controller,

said analyzing unit and said error processing unit execute the respective processes based on the preset data of a printer currently connected to the controller which is stored in the preset data storage unit.

Claim 15 (Original): A recording medium according to claim 12 wherein,

said controller further comprises a printer recognizing unit that inquires and recognizes functions of the printer connected to the controller,

said analyzing unit and said error processing unit execute the respective processes based on the functions of a printer currently connected to the controller recognized by the printer recognizing unit.

Claim 16 (Original): A recording medium according to claim 14 wherein,

said preset data storage unit stores preset data of the printer informed from the host in advance.

Claim 17 (Original): A recording medium according to claim 15 wherein,

said preset data storage unit stores preset data of the printer informed from the host in advance.

Claim 18 (Original): A recording medium according to claim 12 wherein, when a printer incapable of transmitting a paper feed completion signal is connected to the controller, said error

processing unit estimates the number of pages of which printing have been completed based on the performance of the printer and transmits the estimated number of pages with error data to the host.

Claim 19 (Previously Presented): A controller that receives printing data for each page from a host, transfers the printing data to a printer and controls the printer to print the printing data while monitoring states thereof is characterized in that it comprises:

an analyzing unit that analyzes the printing data and manages the number of pages transferred to the printer;

an error processing unit that passes error data and the number of pages of which printing have been completed to the host when an error occurred in the printer; and

wherein said analyzing unit is provided with a plurality of analyzing units corresponding to different types of printers, and one of the analyzing units is selected corresponding to the type of printer connected to the controller.

Claim 20 (Previously Presented): A recording medium readable by computers on which programs are recorded which enable a computer to proceed the steps of receiving printing data for each page from a host, transferring the printing data to a printer and controlling the printer to print the printing data while monitoring states thereof, is characterized in that:

said programs enable said computer to function as an analyzing unit that analyzes the printing data and manages the number of pages transferred to the printer; and

an error processing unit that informs error data and the number of pages of which printing have been completed to the host when an error occurs in the printer; and

wherein said analyzing unit is provided with a plurality of analyzing units corresponding to different types of printers, and one of the analyzing units is selected corresponding to the type of a printer connected to the controller.

Claim 21 (Currently Amended): A controller that receives printing data for each page from a host, having a data transferring unit that transfers the printing data to a printer without having ~~an exclusive memory~~ storage unit for storing the printing data in the controller and controls the printer to print the printing data while monitoring states thereof is characterized in that it comprises:

an analyzing unit that analyzes the printing data and manages the number of pages transferred to the printer; and

an error processing unit that passes error data and the number of pages of which printing have been completed to the host when an error occurred in the printer;

wherein said analyzing unit is provided with a plurality of analyzing units corresponding to different types of printers, and one of the analyzing units is selected corresponding to the type of printer connected to the controller;

wherein said controller further comprises a preset data storage unit that stores preset data of printers to be connected to the controller, and

wherein said analyzing unit and said error processing unit execute the respective processes based on the preset data of a printer currently connected to the controller which is stored in the preset data storage unit.

Claim 22 (Previously Presented): A recording medium readable by computers on which programs are recorded which enable a computer to process the steps of receiving printing data for each page from a host, transferring the printing data to a printer and controlling the printer to print the printing data while monitoring states thereof, is characterized in that:

said programs enable said computer to function as an analyzing unit that analyzes the printing data and manages the number of pages transferred to the printer; and

an error processing unit that informs error data and the number of pages of which printing have been completed to the host when an error occurs in the printer;

wherein said analyzing unit is provided with a plurality of analyzing units corresponding to different types of printers, and one of the analyzing units is selected corresponding to the type of a printer connected to the controller.